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FIGURE 1

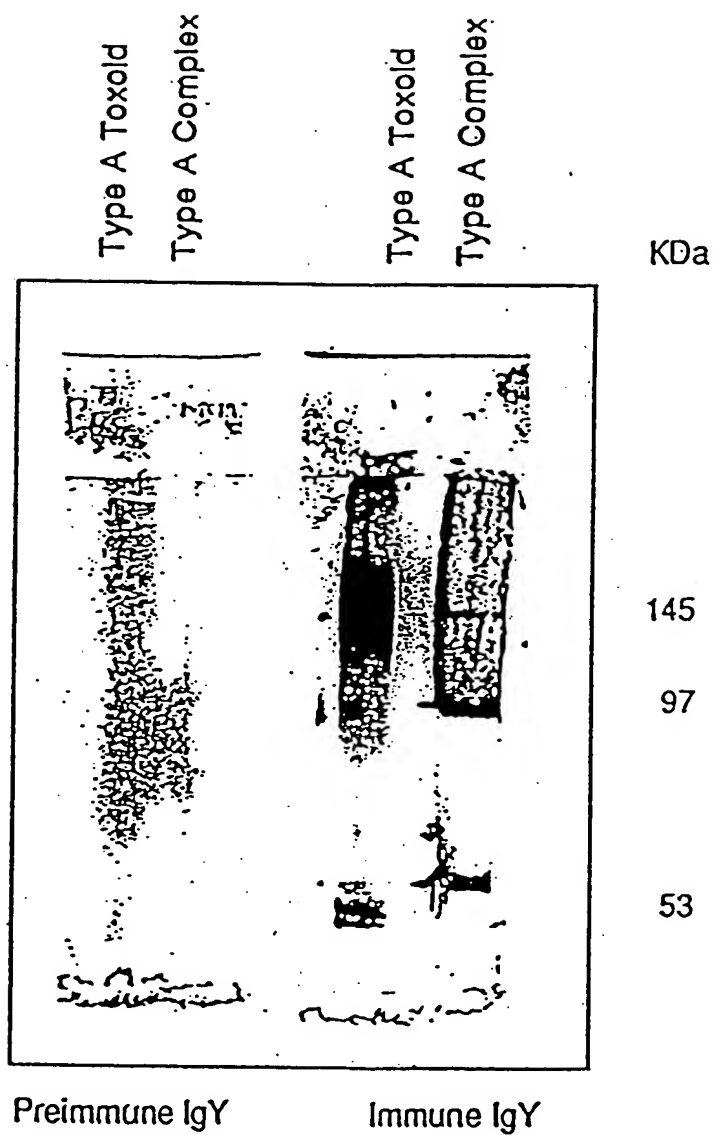


FIGURE 2

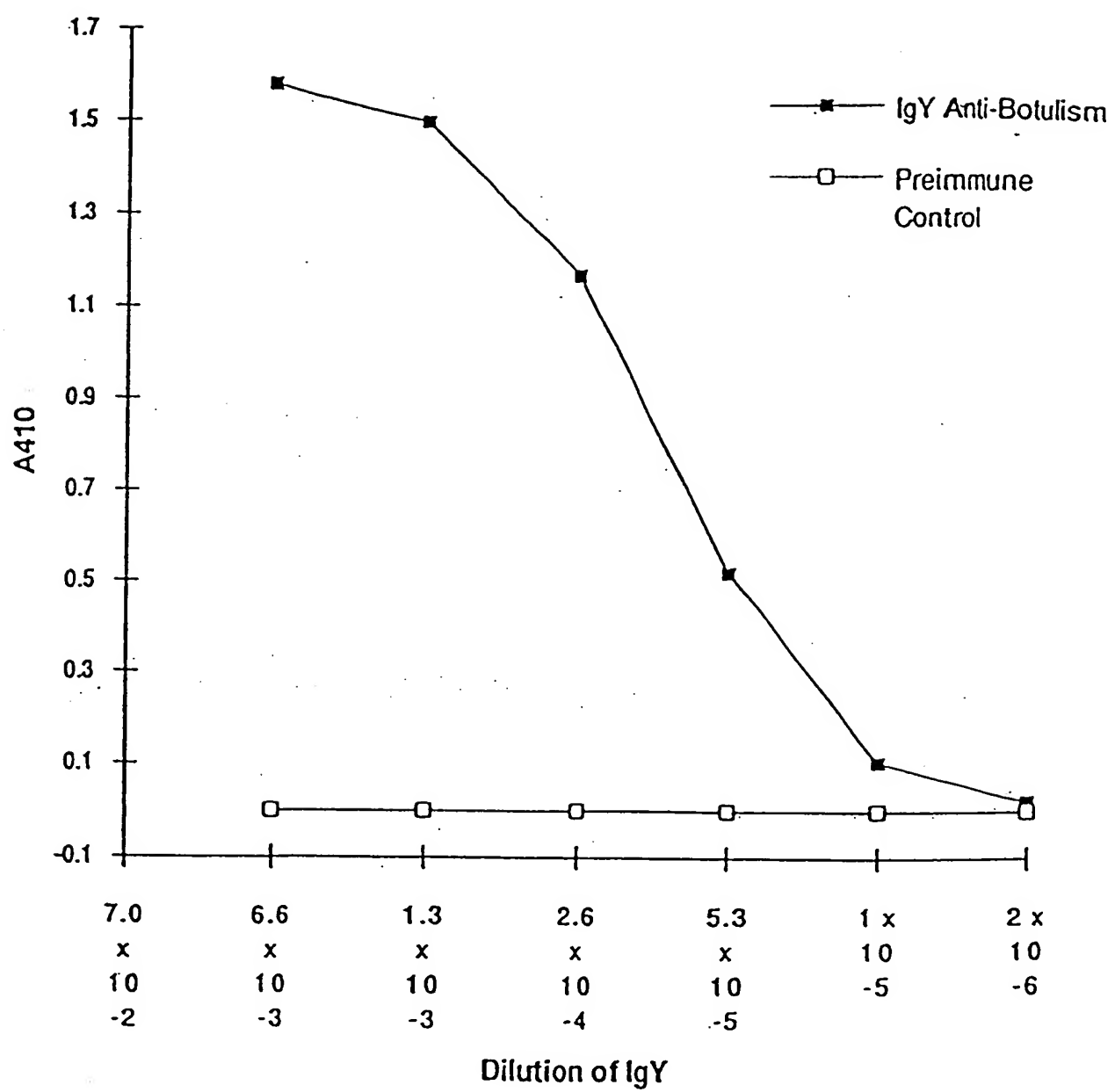


FIGURE 3

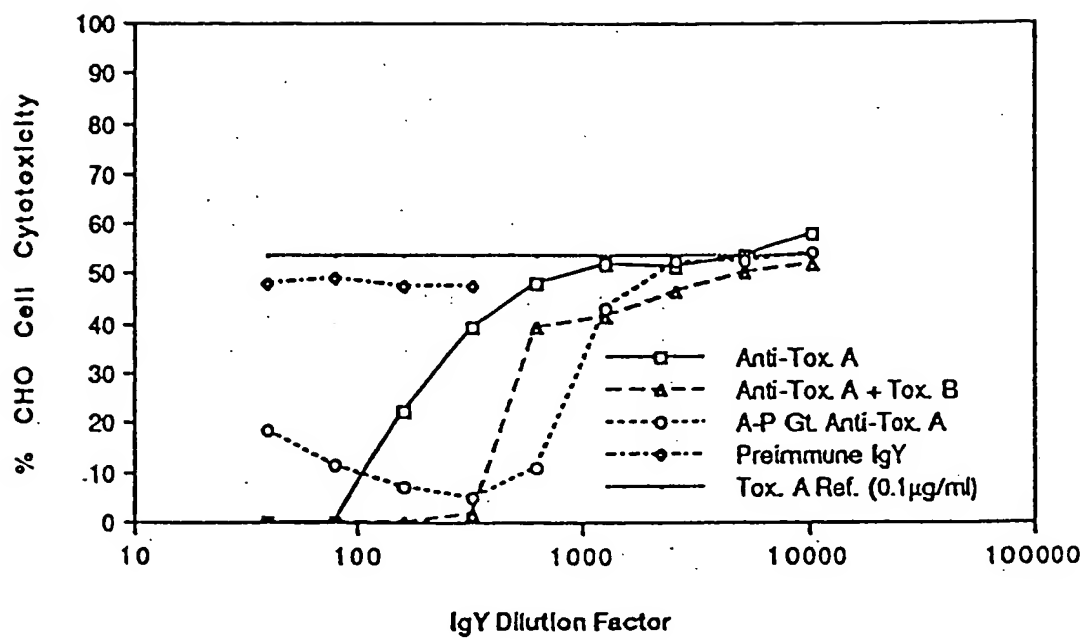


FIGURE 4

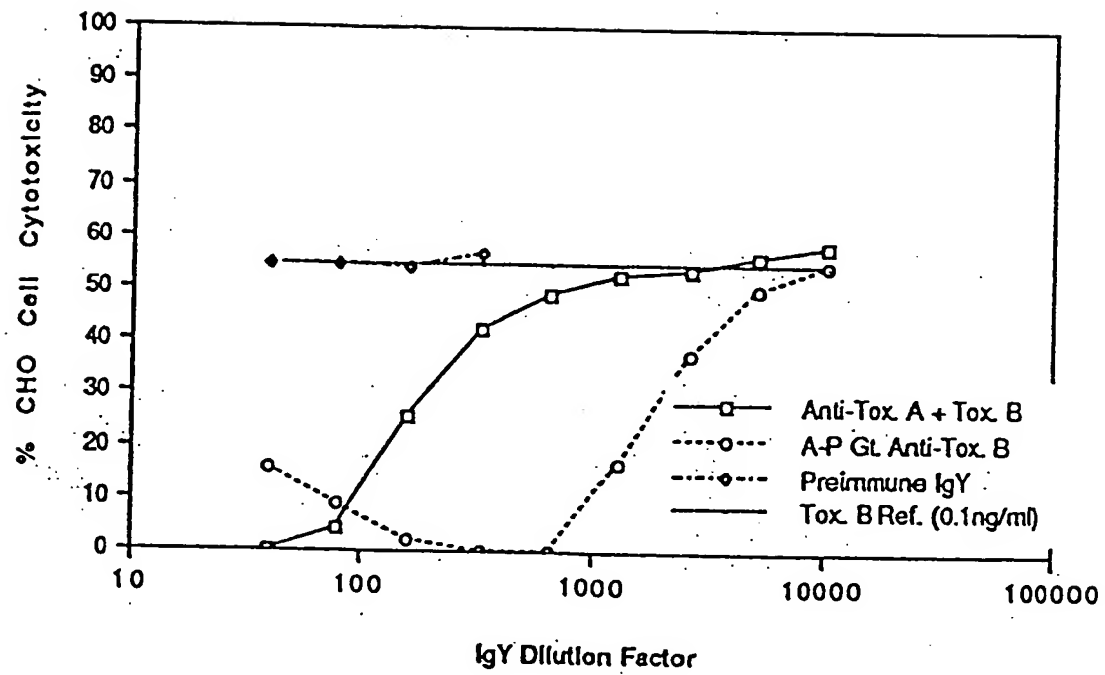


FIGURE 5

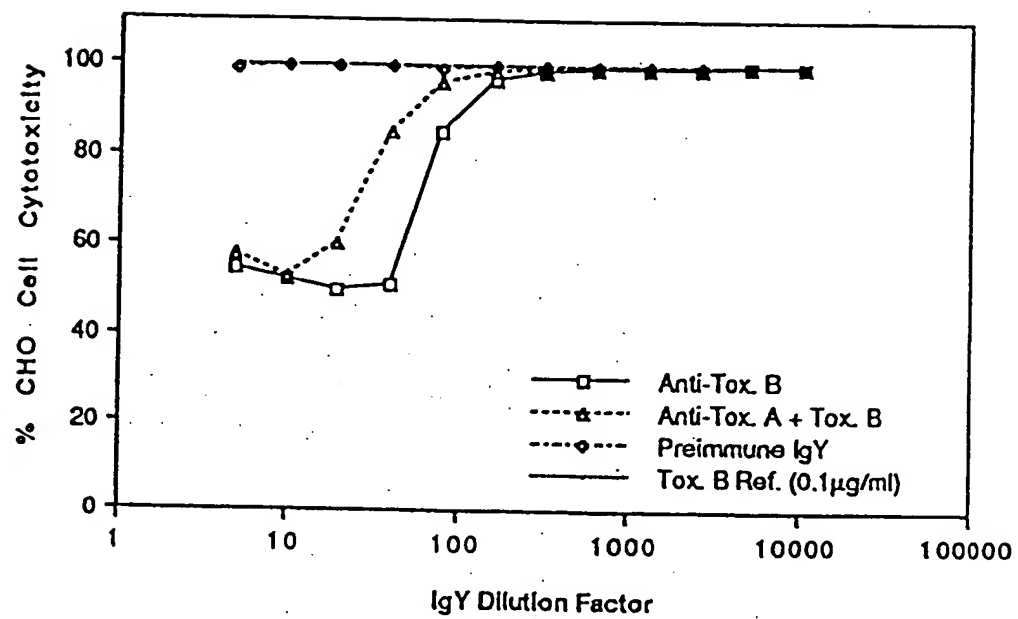
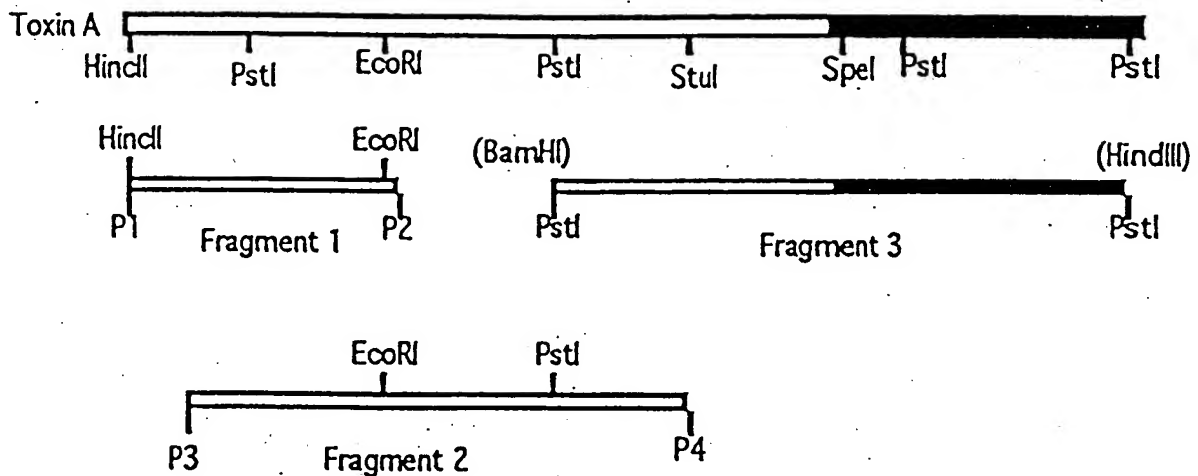


FIGURE 6



P1-P4 are PCR primers 1-4. P1=5'GGAAATTTAGCTGCAGCATCTGAC3', P2=5'TCTAGCAAATTCGCTTGTGTTGAA3', P3=5'CTGCATATAGCATTAGACC3', P4=5'CTATCTAGGCCTAAAGTAT3'. Indicated restriction sites in fragments 1 and 2 are internal sites used to clone into pGEX2T vector (fragment 1; construct called pGA30-660) or pMALc vector (fragment 2; construct called pMA660-1100). Bracketed restriction sites at ends of fragment 3 are pUC9 polylinker sites utilized to clone fragment 3 into pET23 vector (construct called pPA1100-2680). Numbers in these constructs refer to toxin A amino acid interval that is expressed. The shaded portion of the toxin A gene corresponds to the repeating ligand binding domain.

FIGURE 7

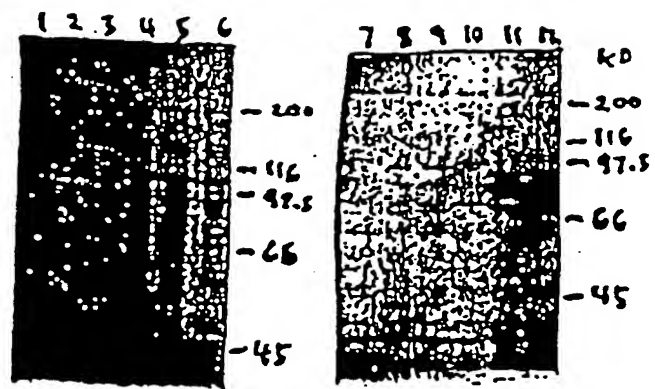


FIGURE 8

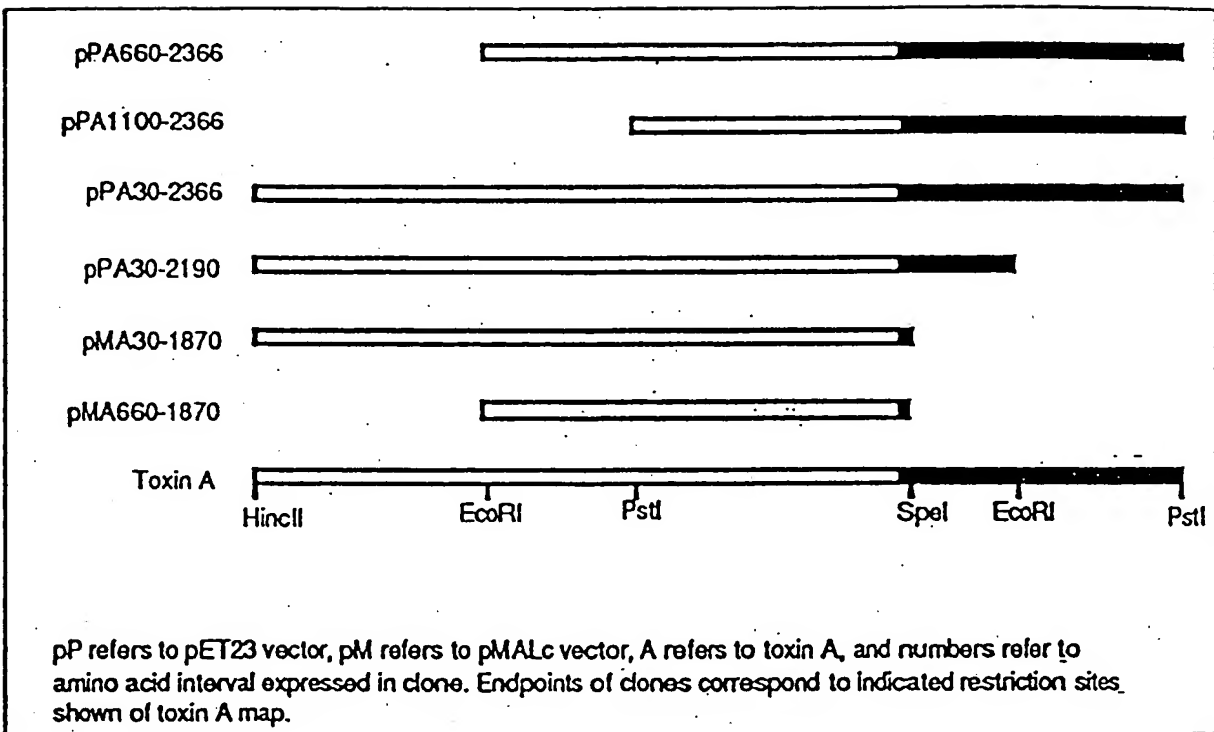


FIGURE 9

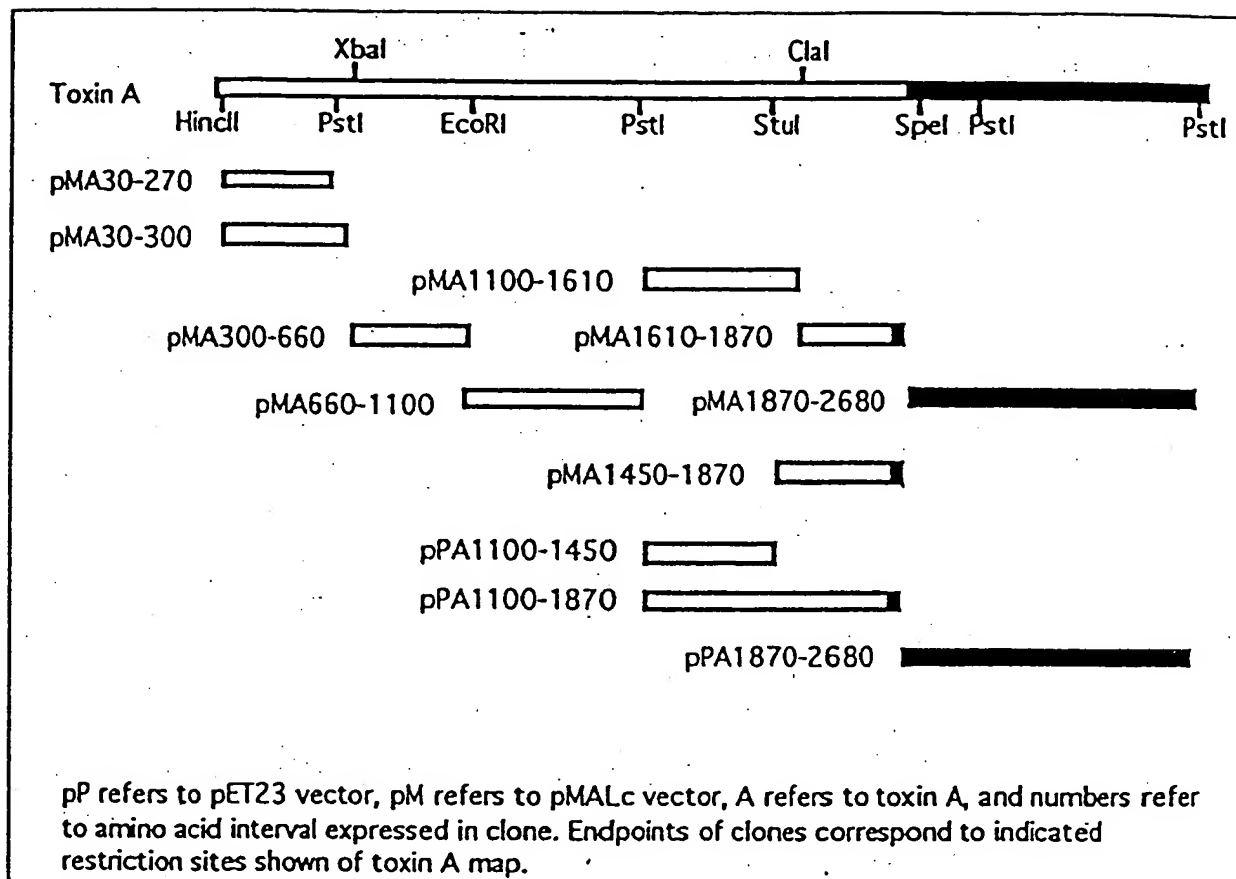


FIGURE 10

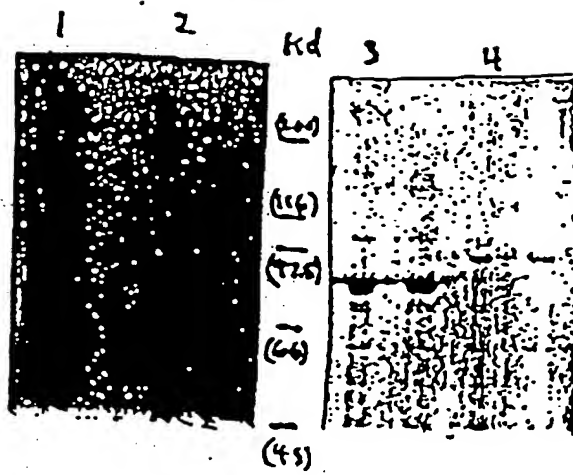


FIGURE 11

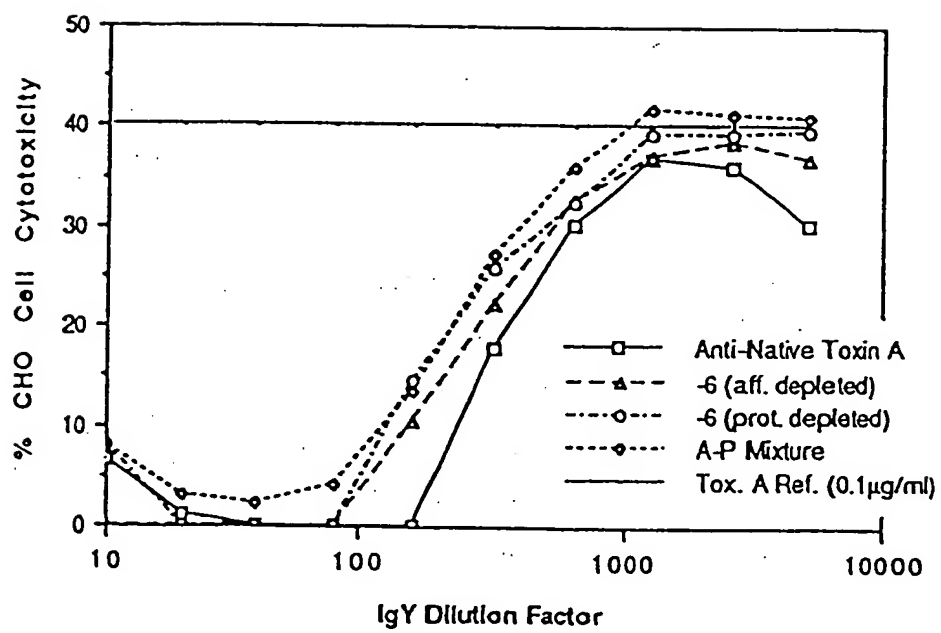


FIGURE 12

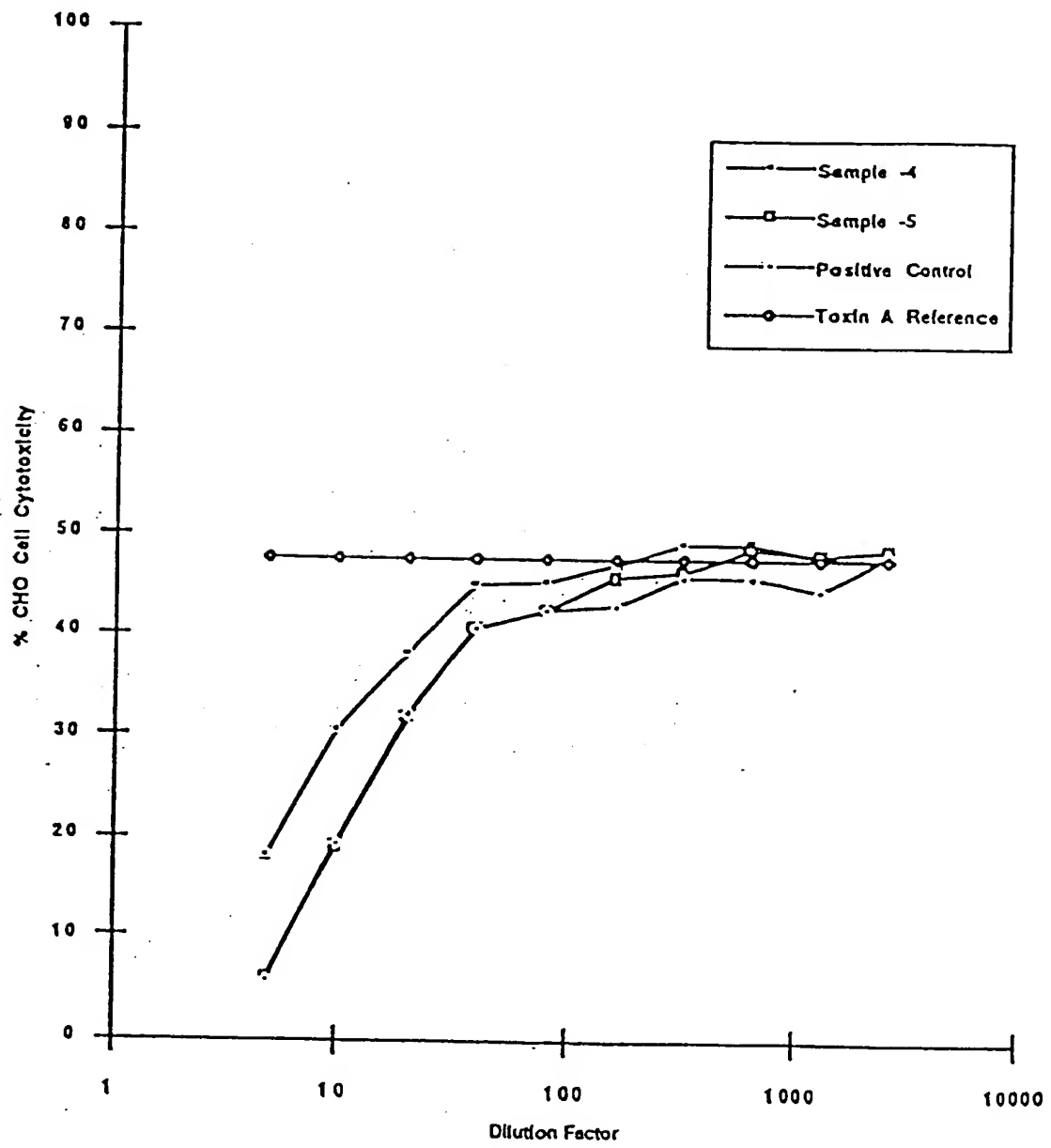


FIGURE 13

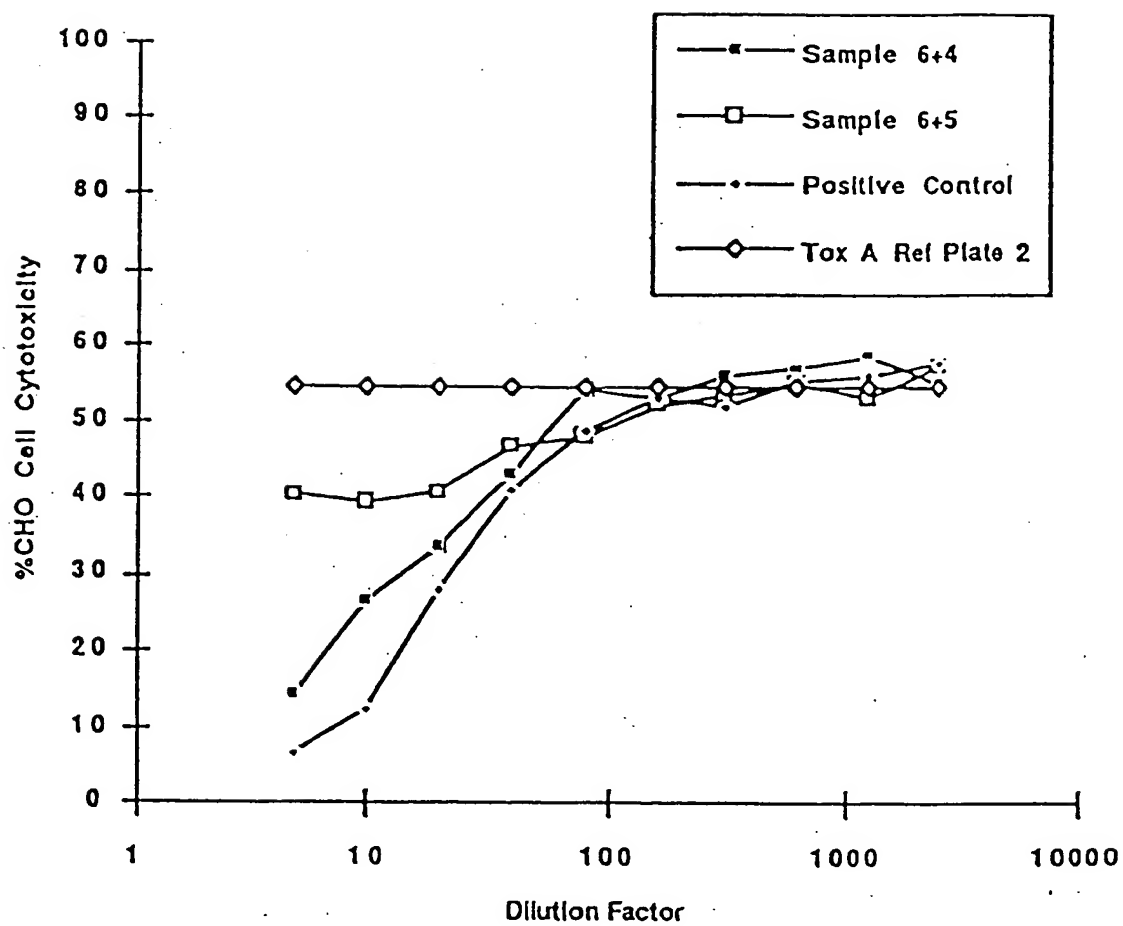


FIGURE 14

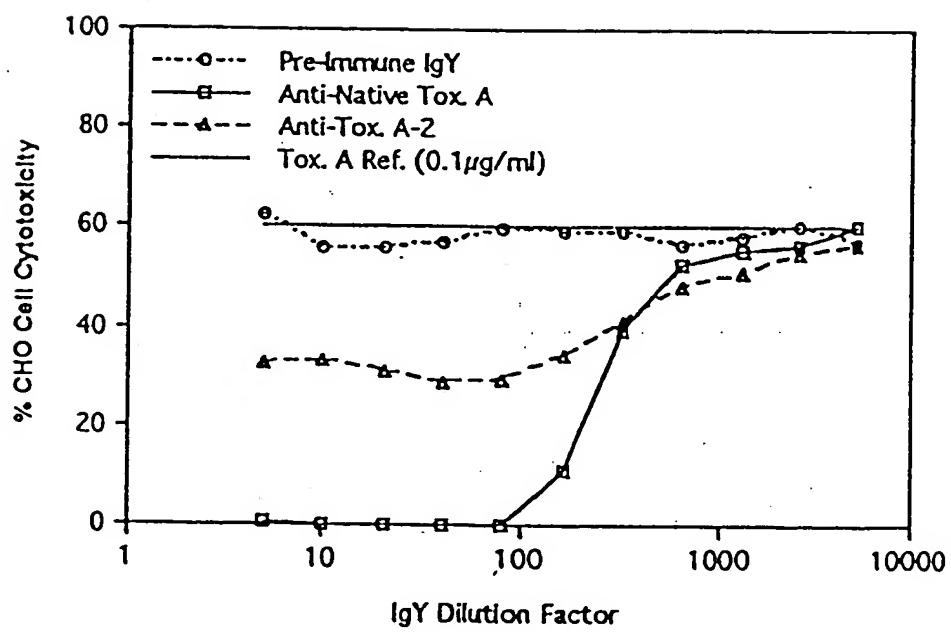
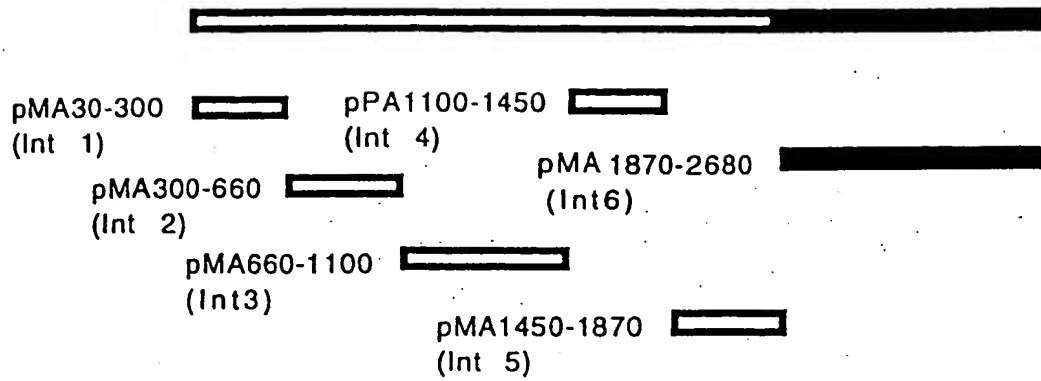


FIGURE 15

A



B

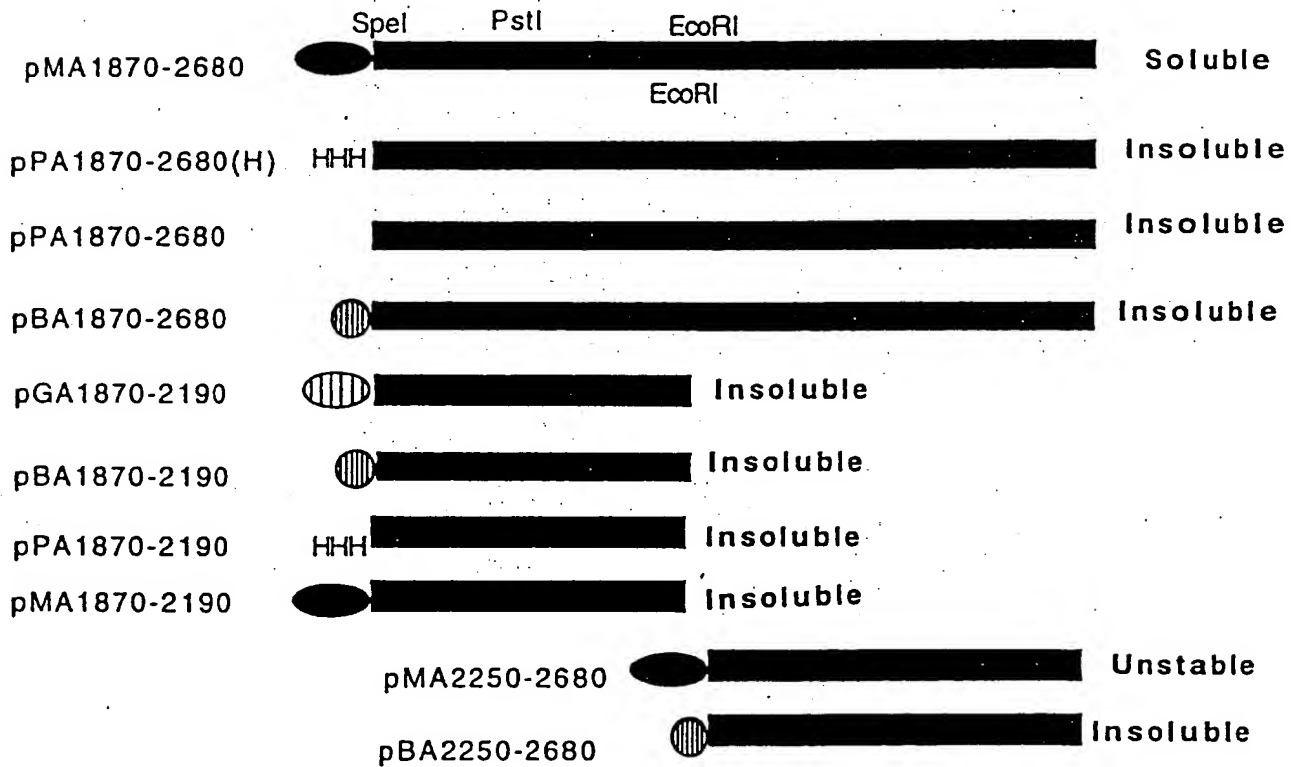


FIGURE 16

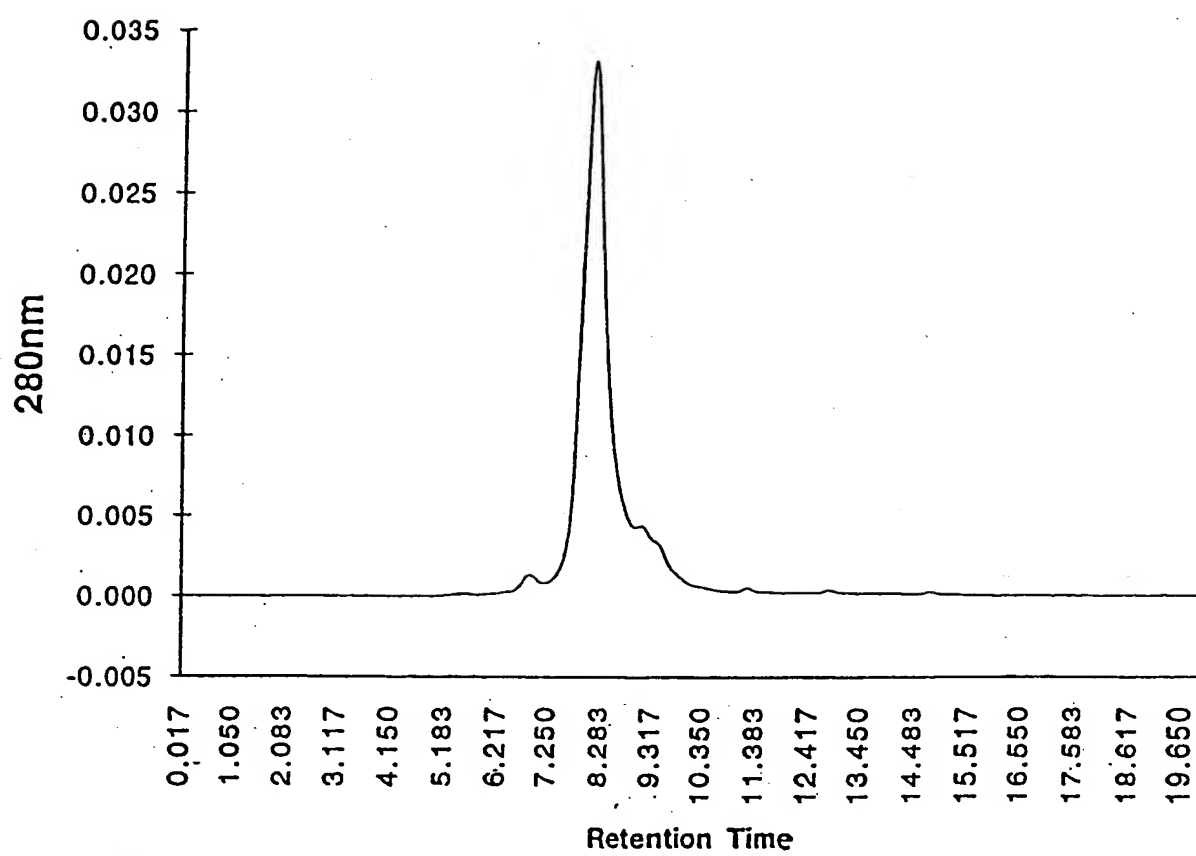


FIGURE 17

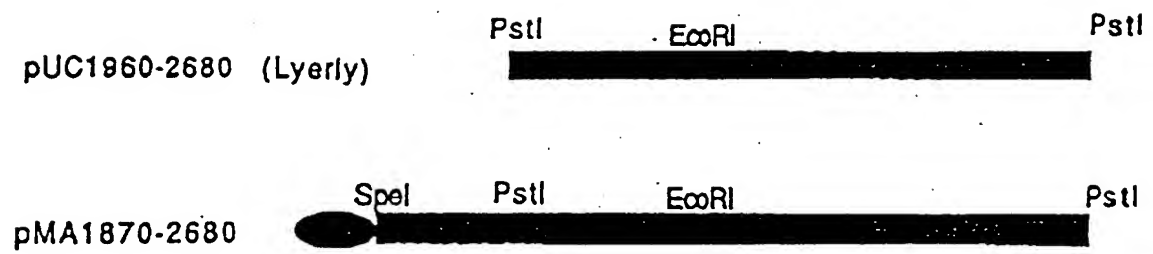


FIGURE 18

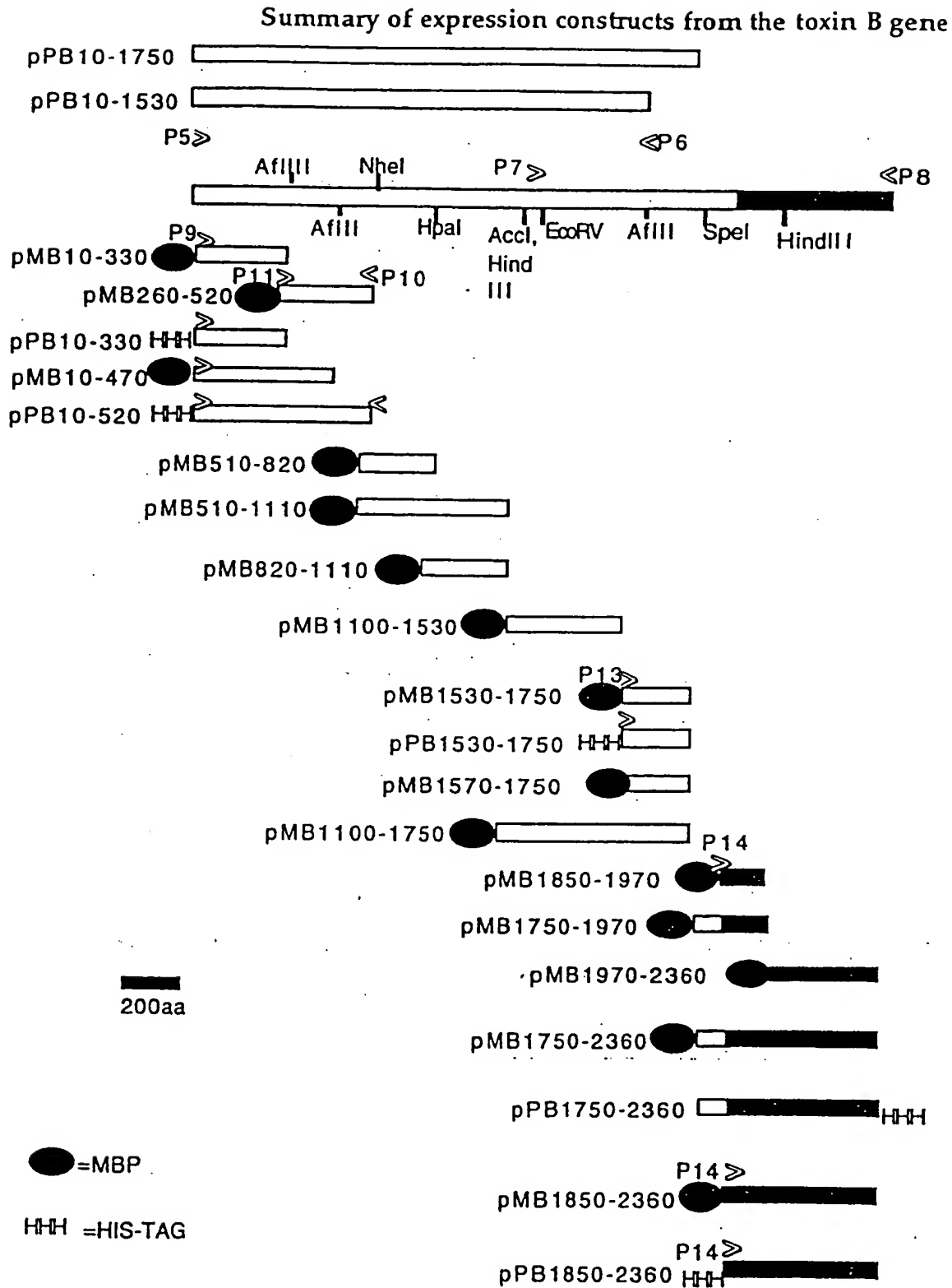


FIGURE 19

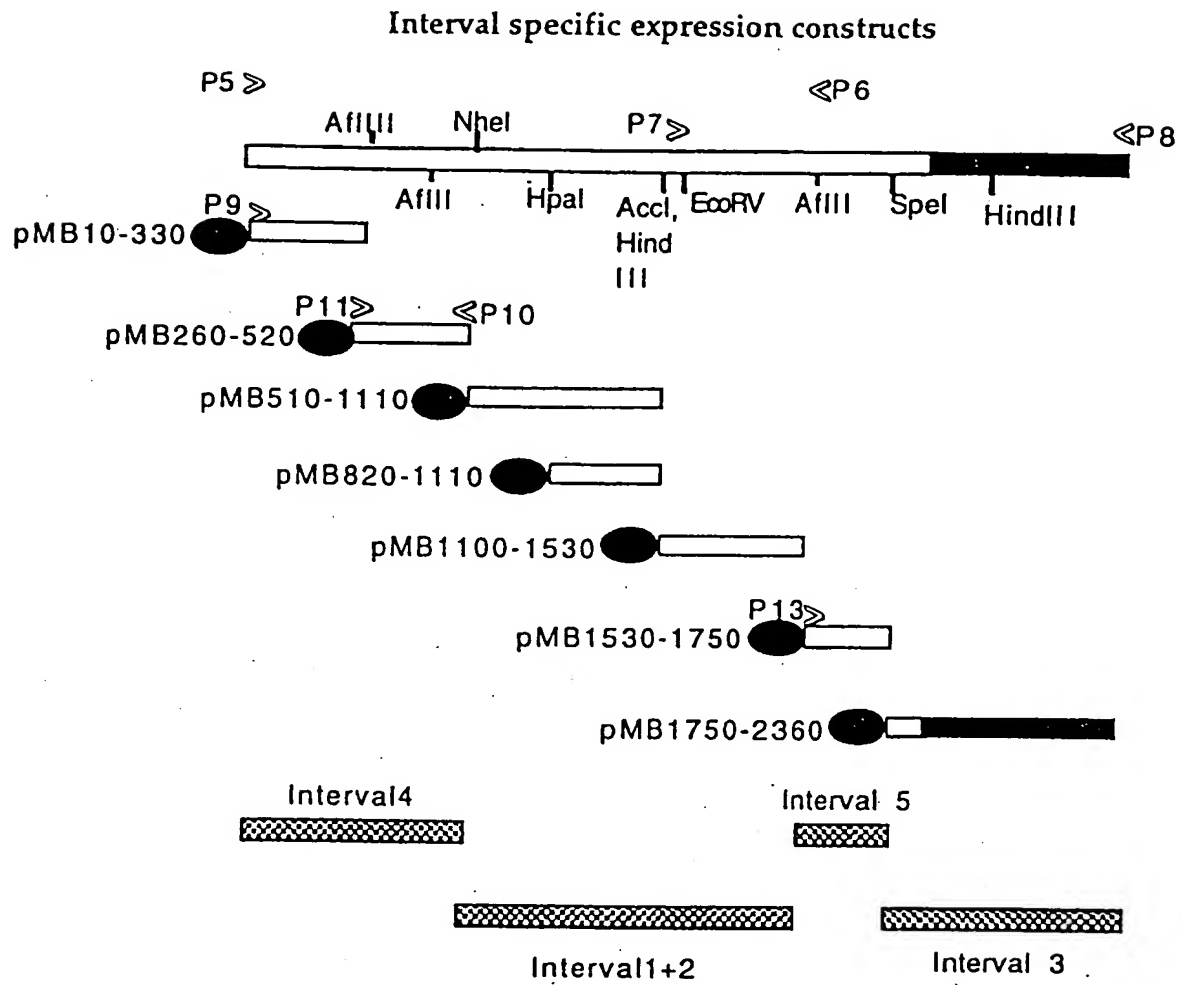


FIGURE 20

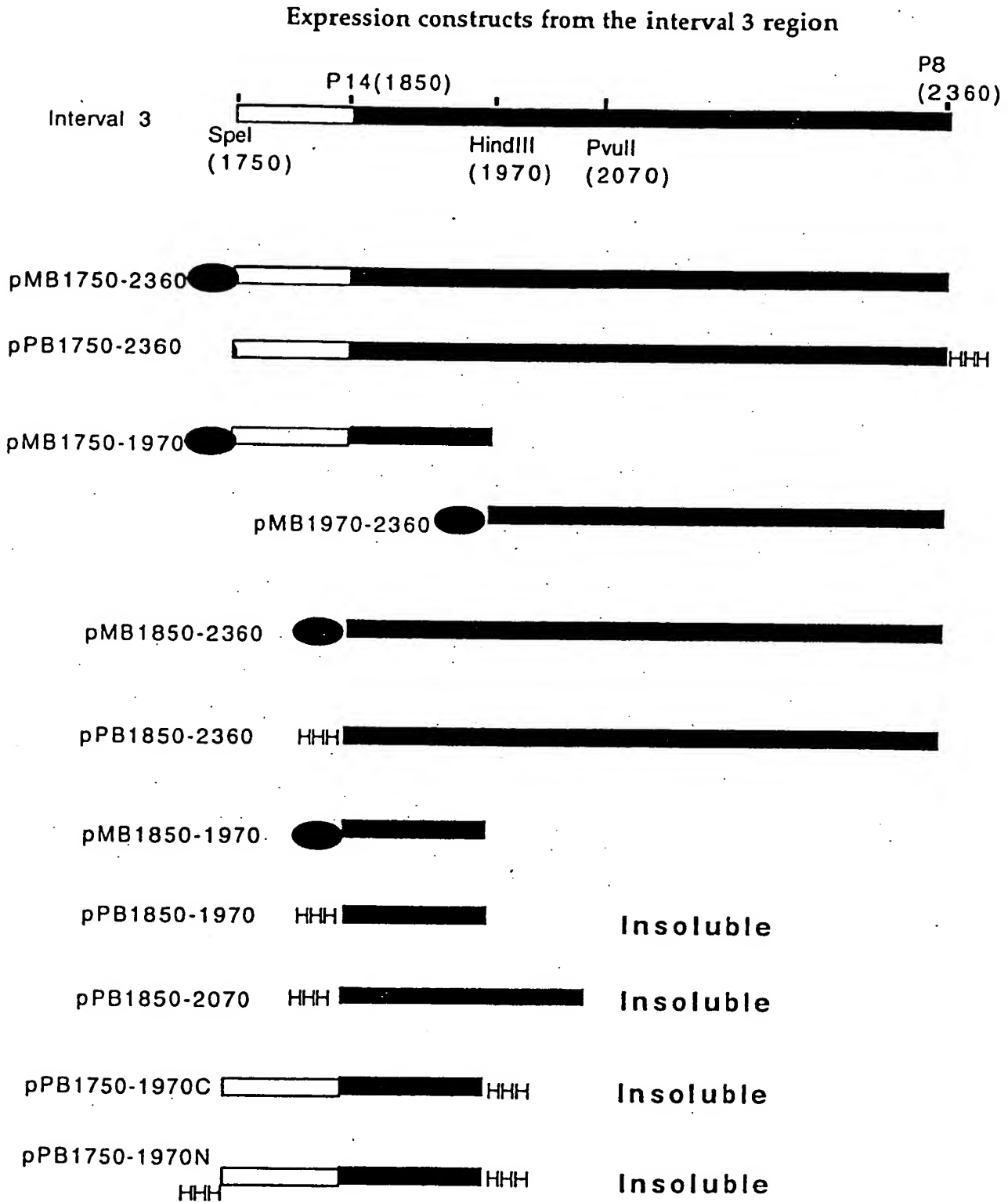


FIGURE 21

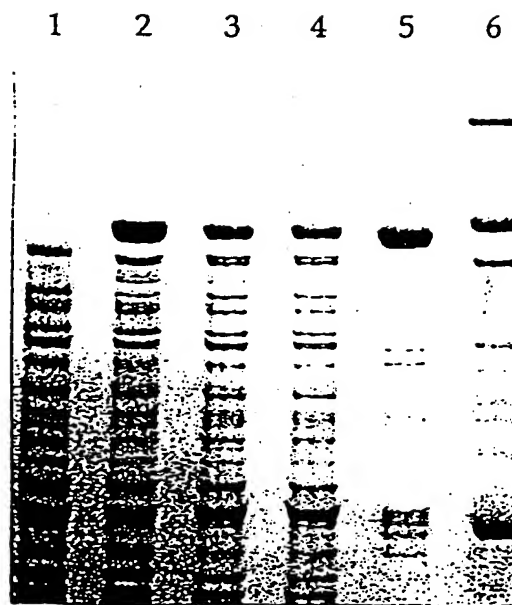


FIGURE 22

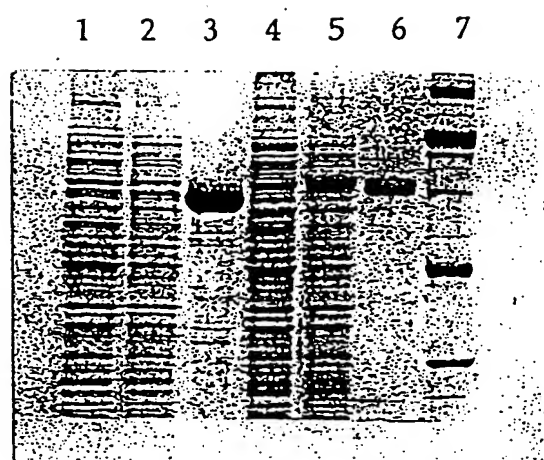


FIGURE 23

Binding of neutralizing CTB antibodies by recombinant toxin B protein

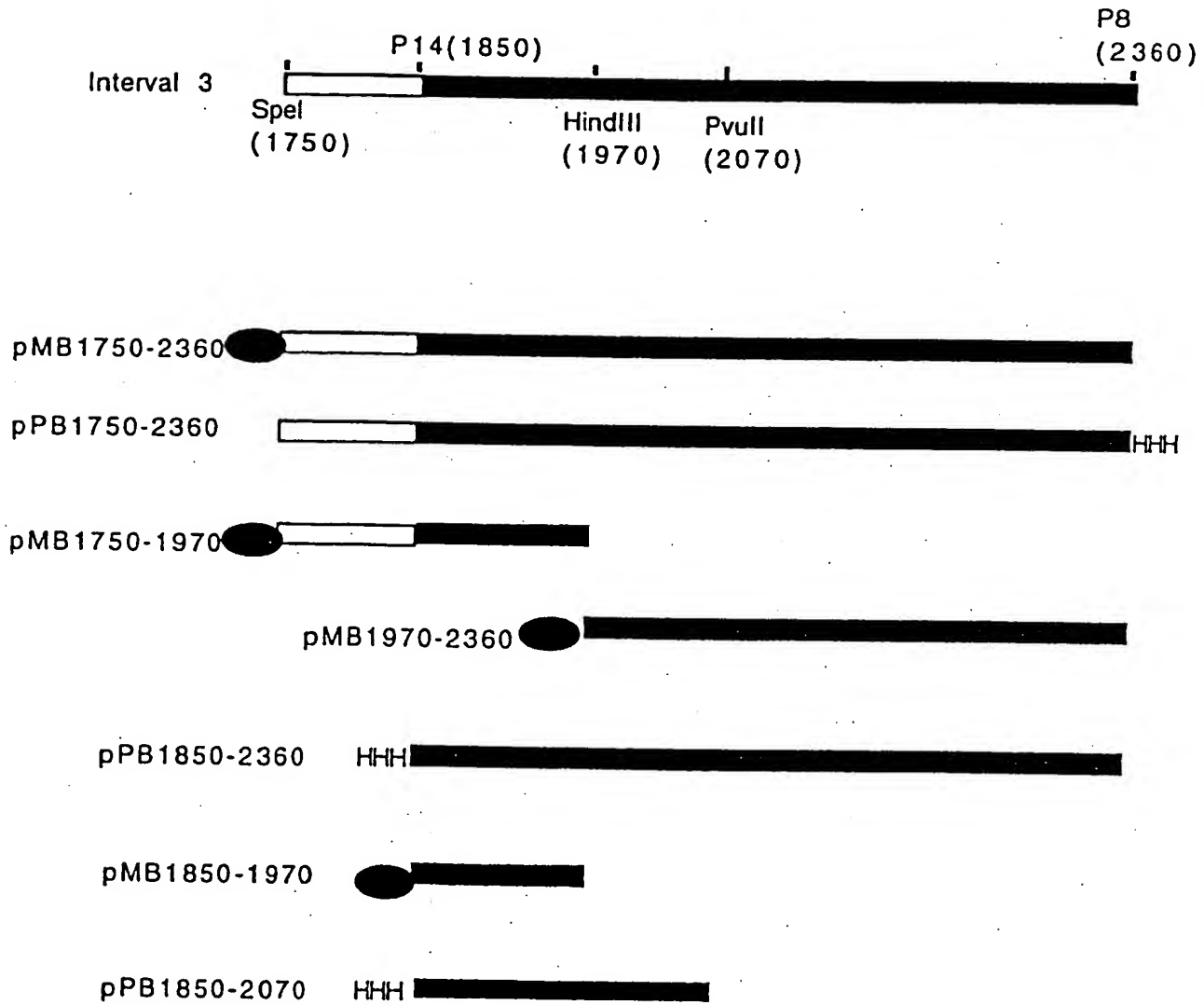


FIGURE 24

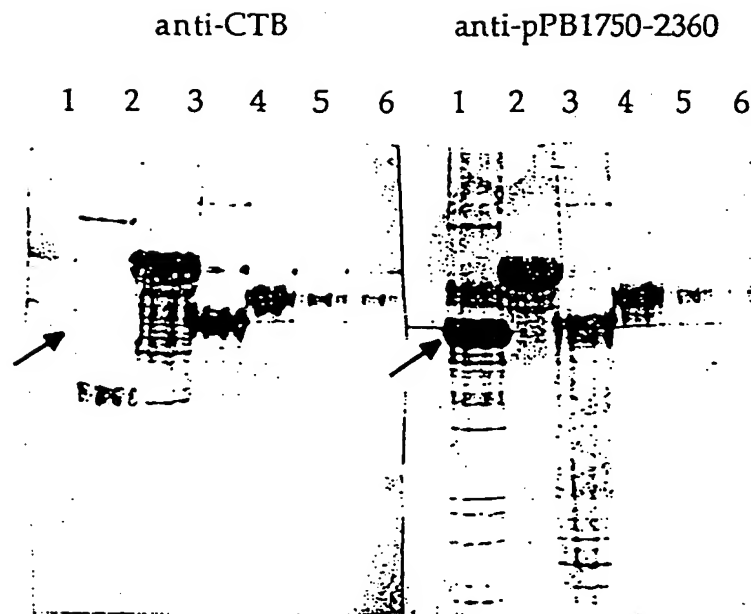


FIGURE 25

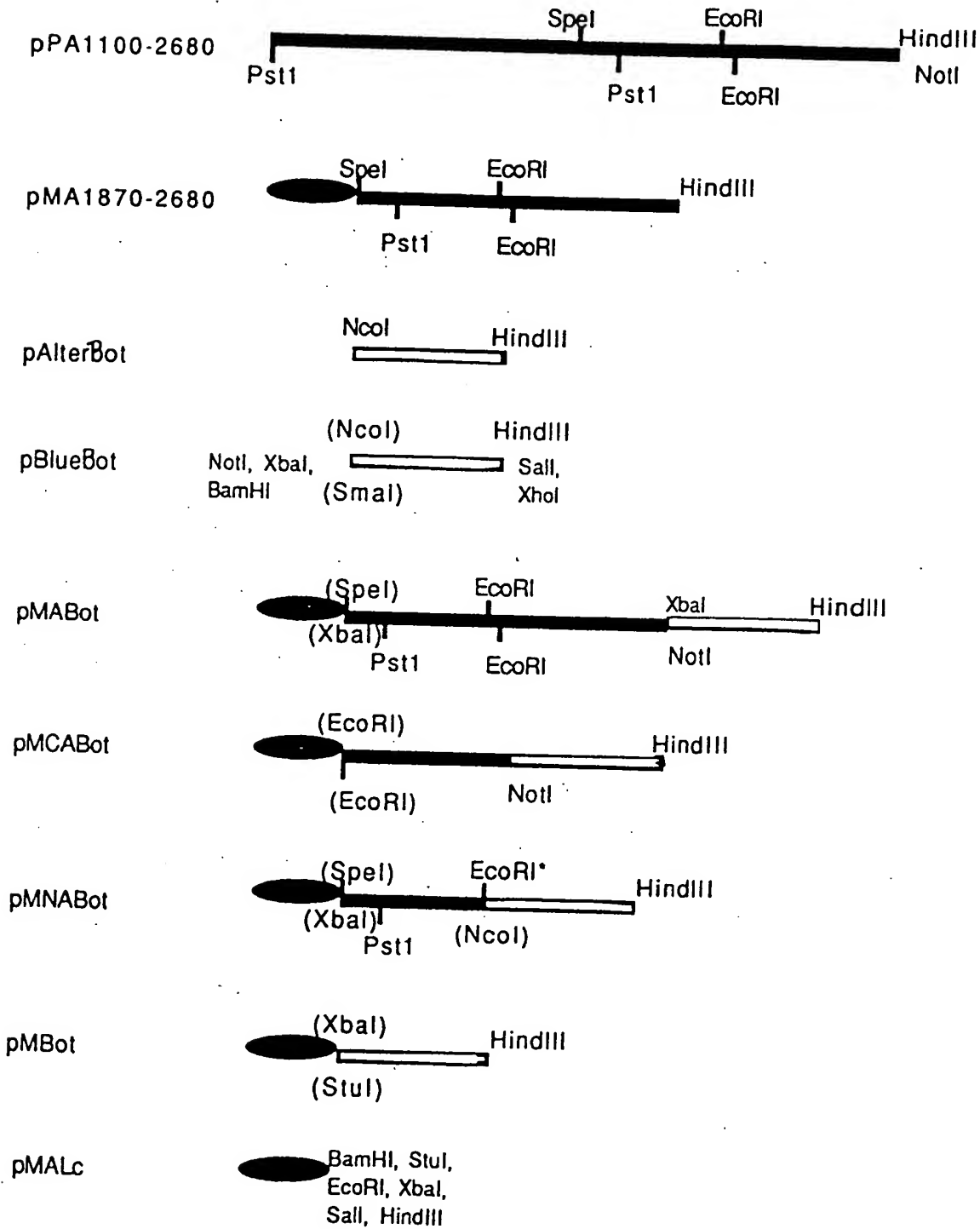


FIGURE 26

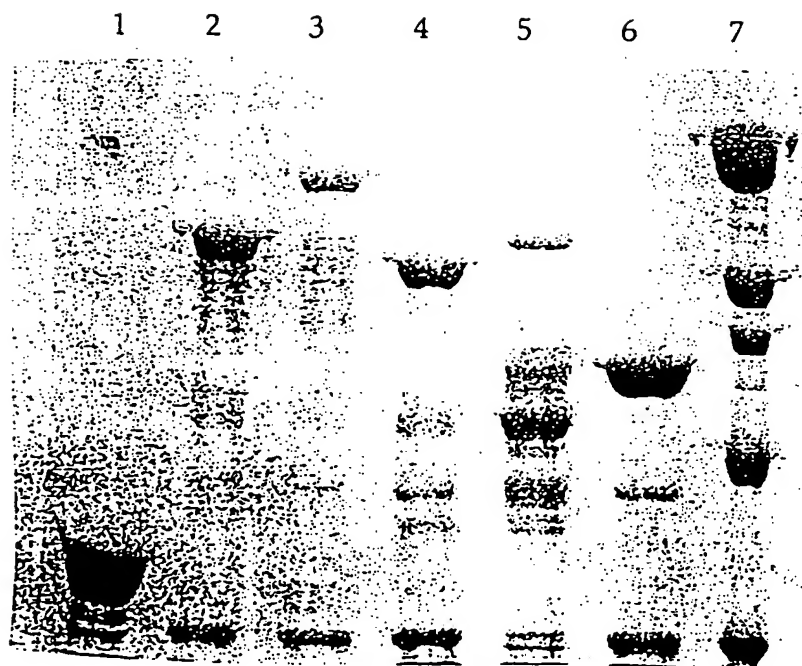


FIGURE 27

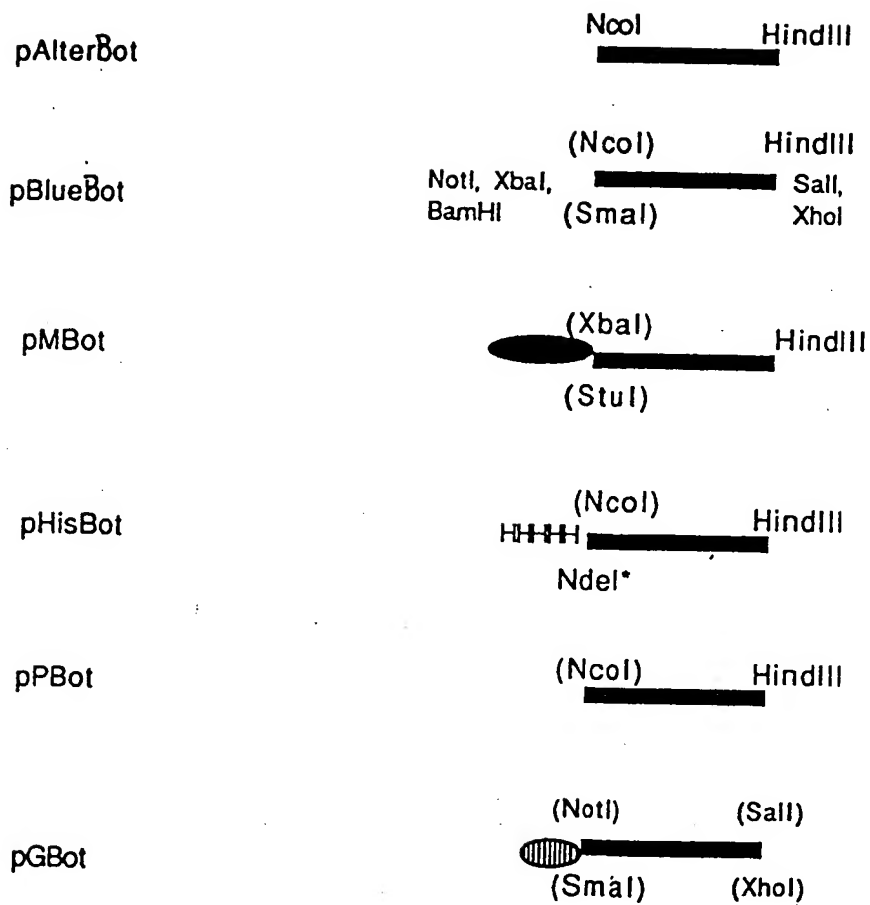


FIGURE 28

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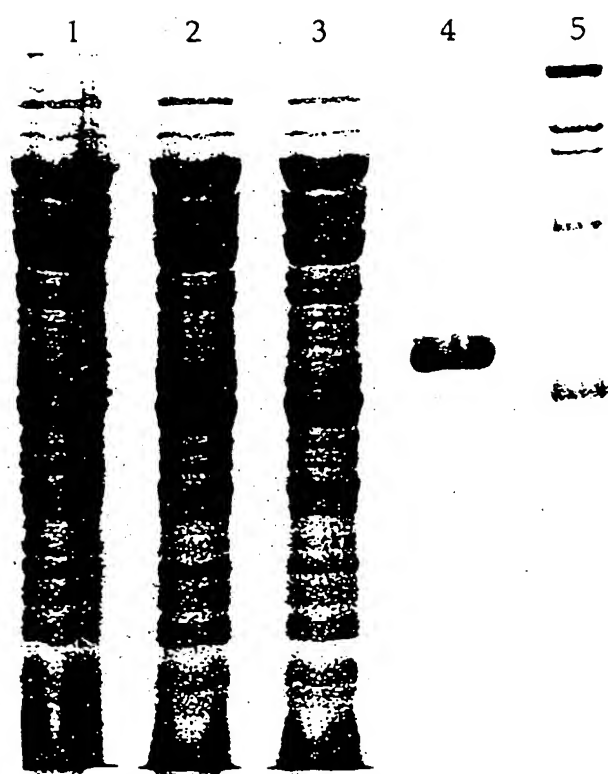


FIGURE 29

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1 2 3 4 5 6 7 8 9 10 11 12 13 14

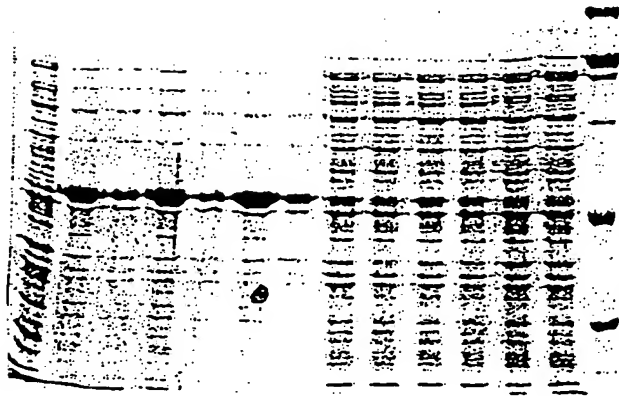


FIGURE 30

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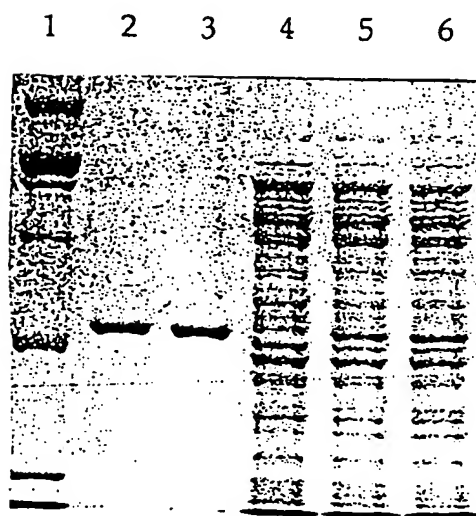
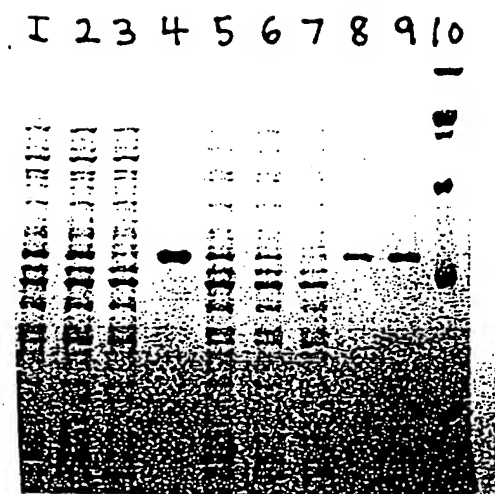


FIGURE 31



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FIGURE 32

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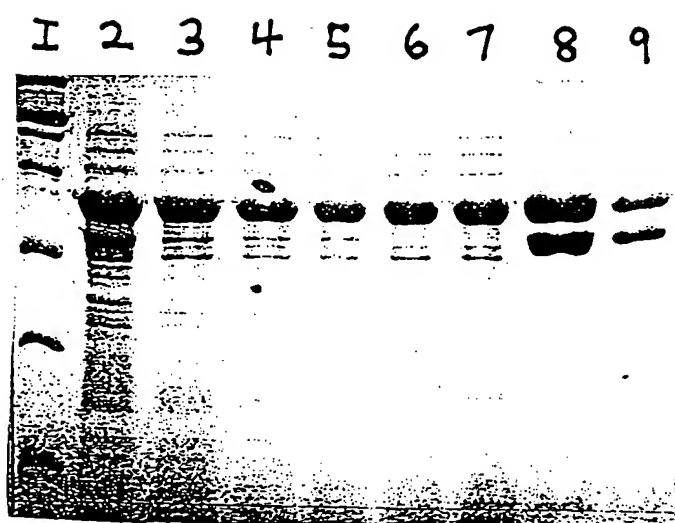


FIGURE 33

TEST AVAILABILITY

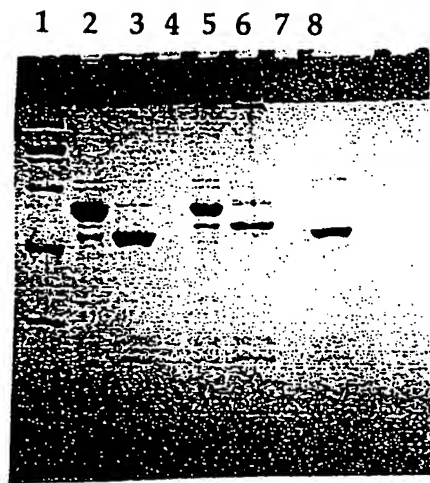
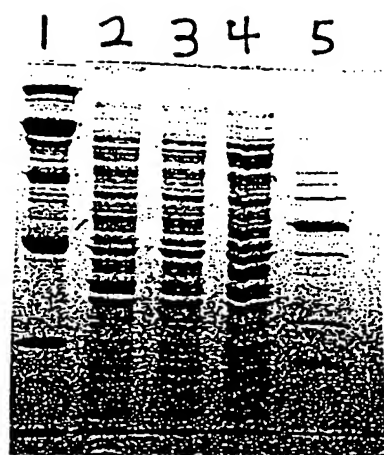
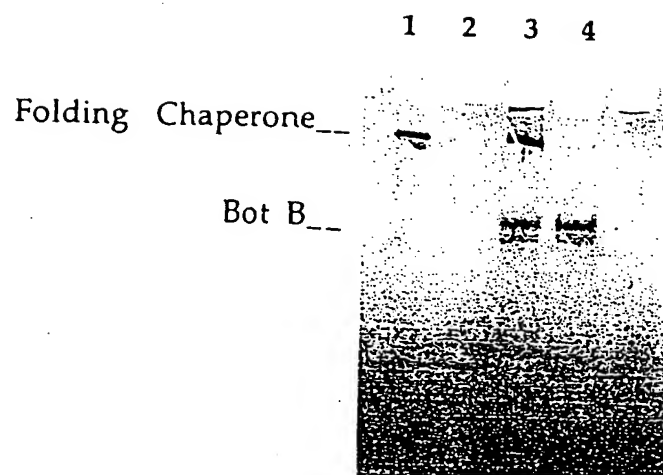


FIGURE 34



REST / 19700 20000

FIGURE 35



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FIGURE 36

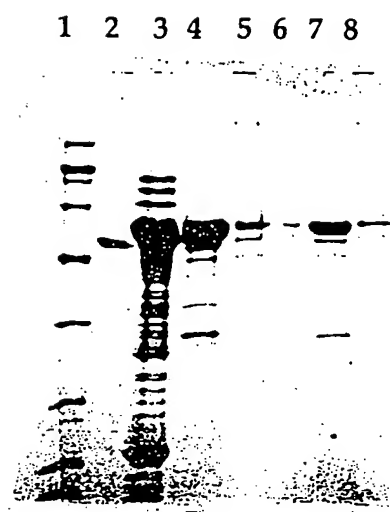


FIGURE 37

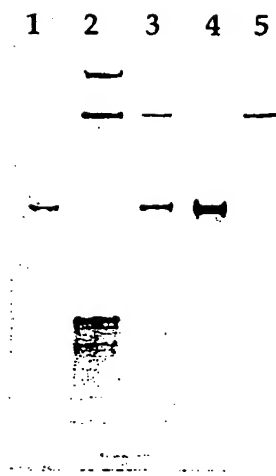


FIGURE 38

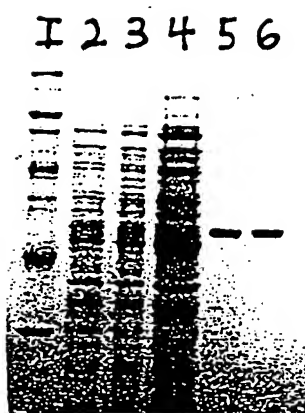


FIGURE 39

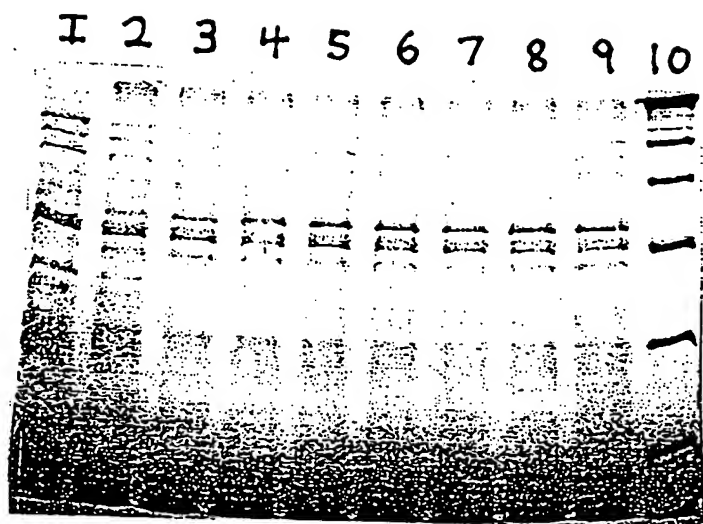


FIGURE 40

